

PUYALLUP – WHITE RIVER (PUYALLUP) SPRING CHINOOK

STOCK STATUS

1992 STATUS

Critical

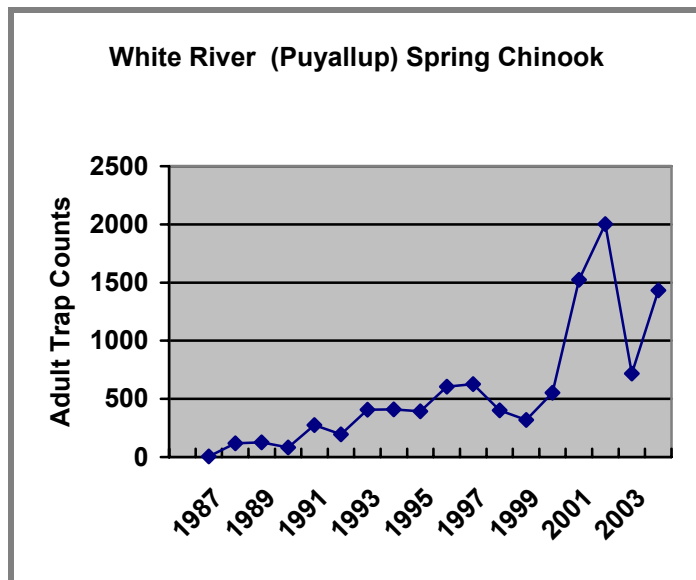
2002 STATUS

Critical

STOCK STATUS RATING DATA

USEFULNESS FOR RATING STOCK STATUS: Good

YEAR	ADULT TRAP COUNTS
1986	6
1987	117
1988	127
1989	83
1990	275
1991	194
1992	406
1993	409
1994	392
1995	605
1996	628
1997	402
1998	320
1999	553
2000	1,523
2001	2,002
2002	718
2003	1,434



Data are counts of adult chinook spawners at the U.S. Army Corps of Engineers adult trap on the White River (RM 24.3) near the town of Buckley. Chinook with adipose fin clips and/or coded wire tags indicating hatchery origin are excluded from these counts. Surplus White River spring chinook juveniles at the Muckleshoot Tribe's White River Hatchery and the WDFW Hupp Springs Hatchery are released into the White River from acclimation ponds in the upper watershed, above Mud Mountain Dam. These juveniles are marked with left or right ventral fin clips. Adult chinook with ventral fin clips are included in the counts of White River spring chinook at the Buckley trap.

There is no evidence that the population has re-established itself naturally or achieved self-sustainability. There is evidence that as many as 30% of the chinook captured at the trap are fall chinook and not White River spring chinook (Shaklee and Young, in review). Stock status remains **Critical** in 2002 due to **chronically low** escapement values and questions about the

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origin of chinook returning to the White River and the sustainability of the increased escapements.

STOCK DEFINITION

White River spring chinook were identified as a stock based on their early river entry (beginning in April), spawning timing and genetic composition.

SPAWNING DISTRIBUTION: Spawning takes place in the mainstem White River, West Fork White River, in the lower reaches of the Clearwater and Greenwater rivers and in lower Huckleberry Creek. Spawning historically took place above Mud Mountain Dam.

SPAWNING TIMING: Spawning generally occurs in late August through September.

GENETIC ANALYSIS: Allozyme and DNA analyses have shown White River spring chinook to be genetically distinct from all other Washington chinook stocks (Marshall et al. 1995). Recent microsatellite DNA analysis indicates that fall chinook are intermingled with spring chinook at the Buckley trap (Shaklee and Young in review).

STOCK ORIGIN

This stock is a **native** stock with **composite** production. A captive broodstock program was initiated in the 1970s but has since been discontinued. In addition to natural production, the stock is now propagated at the WDFW Hupp Springs Hatchery on the Kitsap Peninsula and at the Muckleshoot Tribe's White River Hatchery. Any juveniles in excess of hatchery program needs are released from acclimation ponds in the upper White River above Mud Mountain Dam to supplement the naturally spawning component of the stock.